

**UNITED STATES  
PATENT AND TRADEMARK OFFICE**



# Patent Searching and Search Resources -- An Introduction

USPTO – Office of Patents Stakeholder Experience  
Pro Se Assistance Center

UNITED STATES  
PATENT AND TRADEMARK OFFICE



# Objectives

- At the conclusion of this presentation participants will be able to:
  - Realize the need for a Prior Art Search.
  - Identify Prior Art.
  - Recognize various examples of prior art.
  - Understand common patent classification systems.
  - Perform all three parts of a complete prior art patent search, and
  - Locate useful patent research databases, both U.S. and foreign.

# Does my Invention already exist?

- When an inventor has an idea for a new product, a Prior Art study can be helpful in understanding the landscape of the field of invention. Such as:
  - Is the field of Invention crowded
  - Opportunities for Innovation
  - Competitors in the field
  - Sharpening your invention to differentiate from competitors
- According to the patent law in the United States, an invention **cannot** be patented if the claimed invention was:
  - Patented or
  - Described in a Printed Publication or
  - In Public Use or
  - On Sale or
  - Available to the public

Before the effective filing date of the claimed invention.

# Prior art defined

- Information known publicly before the effective filing date of a U.S. patent application is called prior art.
- Prior art consists of information available to the public including:
  - U.S. patents and published patent applications
  - Foreign patents and published patent applications
  - Journal and magazine articles
  - Books, manuals, and catalogs
  - Websites
  - Conference proceedings
  - Scientific papers

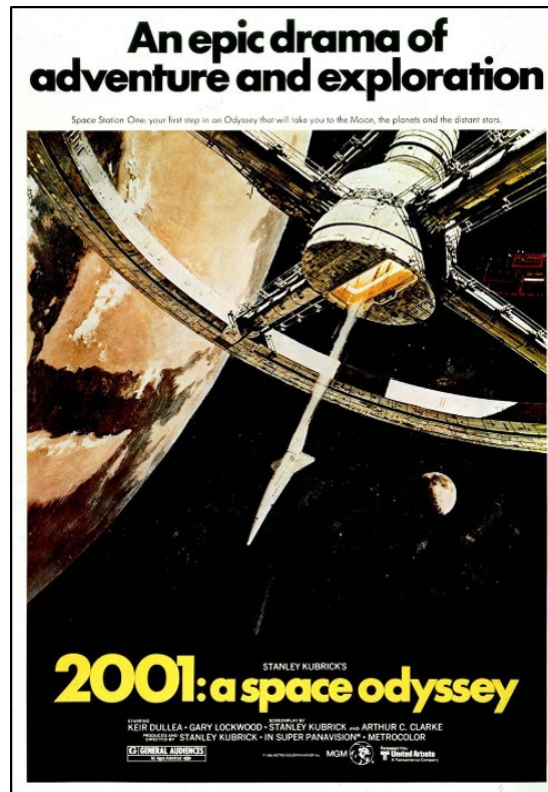
# Examples of prior art

- Prior art may be published on paper **or** electronic format.
- Websites, social media, and various other forms of online publications are frequently cited as valid sources of prior art.



# Examples of prior art

- In 2011 the computer company Apple sued Samsung, claiming that the company had copied its design of the iPad for its Galaxy Tab.
- In defense, Samsung attorneys contended that Apple had patented a common design of a square display with rounded corners which is seen often in movies.
- As evidence of prior art, Samsung referred to scenes from "2001: A Space Odyssey," a science fiction film released in 1968.



# Sample invention, “camping bicycle”

- You have an friend who is an inventor and an avid outdoorsman.
- Recently he approached you with an idea for a bicycle with a folding frame that converts into a backpack.





# Sample invention, “camping bicycle”

- The bicycle is light, portable and easy to pack on camping trips.
- Backpackers and climbers can carry the bicycle uphill and once at the top of a trail unfold the bicycle before making a speedy descent down a mountain.



# Sample patent search exercise

- Any invention or product that **resembles** your friends “camping bicycle,” **could** be considered prior art by the USPTO.
- Perform research to find inventions that are similar or identical to the camping bicycle.
- Confidentiality is important, you do not want someone to copy or steal your friends idea.



# Three types of patent research

- Three major types of prior art patent searches:
  - Text searching,
  - Patent classification searching, and
  - Patent citation searching.
- A complete patent search will involve all three of these methods.

# Text searching

- Identify main concepts of the invention.
- Develop words and terms for each concept.
- Perform text research using multiple databases.

# Identifying main concepts

- Describe the invention in a single written sentence. Perform the same exercise a minimum of three (3) times.
  - 1) Bicycle with a hinged frame and removable front and rear wheels.
  - 2) A portable bicycle that when collapsed may be carried as a backpack.
  - 3) A bicycle with a folding frame and detachable wheels that can be carried in a rucksack by a single person.
- Review all three sentences for words and terms that appear frequently.

# Identifying main concepts

- Repetition of certain words or a phrase often indicate a major concept.

1) **Bicycle** with a **hinged frame** and removable front and rear **wheels**.

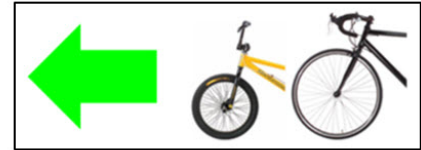
2) A portable **bicycle** that when **collapsed** may be carried as a **backpack**.

3) A **bicycle** with a **folding frame** and detachable **wheels** that can be carried in a **rucksack** by a single person.

# Camping bicycle, main search concepts

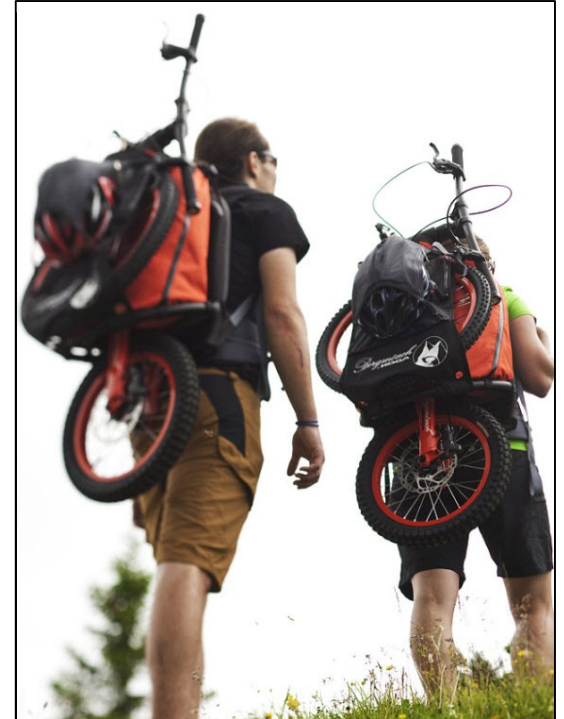
Use dictionaries, technical manuals, and the internet to discover additional words and terms for concepts.

- Backpack or Rucksack or Knapsack
- Bicycle or "Two Wheeled Vehicle"
- (Folding or Hinged or Collapsible) Bicycle Frame
- (Front or Lead or Steering) Wheel
- (Rear or Back or Trail) Wheel



# The broad to narrow searching method

- The broad to narrow research strategy is the foundation of many successful patent searches.
- A researcher begins by identifying main concepts of an invention, and then selecting a primary concept, the single concept that all search results must have in order to be relevant.
- When a broad to narrow patent search is conducted correctly, it virtually guarantees that the primary concept will be present in the final results.
- In the following example the backpack has been selected by the searcher as the primary concept, through which all other concepts will be filtered.





# Camping bicycle, broad to narrow search

- In this broad to narrow search the X1 (backpack) primary concept becomes a filter to which all other concepts are added.
- Set numbers X1 – X5 may be thought as an order of priority list, where X1 represents the most critical concept in the patent search.
- The search may be paused temporarily when a set of results is small enough to review (X8 and X11).

<u>Set Number</u>	<u>Database Commands</u>	<u>Hits/Results</u>
X1	Backpack or Rucksack	10,000
X2	Bicycle or "Two Wheeled Vehicle"	1,500,000
X3	Folding Bicycle Frame	40,000
X4	Front Wheel	200,000
X5	Rear Wheel	3,000,000
X6	X1 AND X2	4,000
X7	X6 AND X3	500
X8	X7 AND X4	50
X9	X1 AND X5	8,000
X10	X9 AND X2	400
X11	X10 AND X3	30

# Camping bicycle, broad to narrow search



X1			10,000
X2			1,500,000
X3			40,000
X4			200,000
X5			3,000,000
X6	 X1 AND X2		4,000
X7	X6 AND X3		500
X8	X7 AND X4		50
X9	 X1 AND X5		8,000
X10	X9 AND X2		400
X11	X10 AND X3		30

# Classification searching

- Use of classification codes to search for prior art.
- Determine the area of technology relevant to an invention.
- Limit, focus, or target the search to a specific area of art when searching patent files.

# Classification systems

- A classification system is a system of hierarchical categories used to organize like “things” by their characteristics and relationships.
- Classification systems are useful for sorting and searching large collections of information.

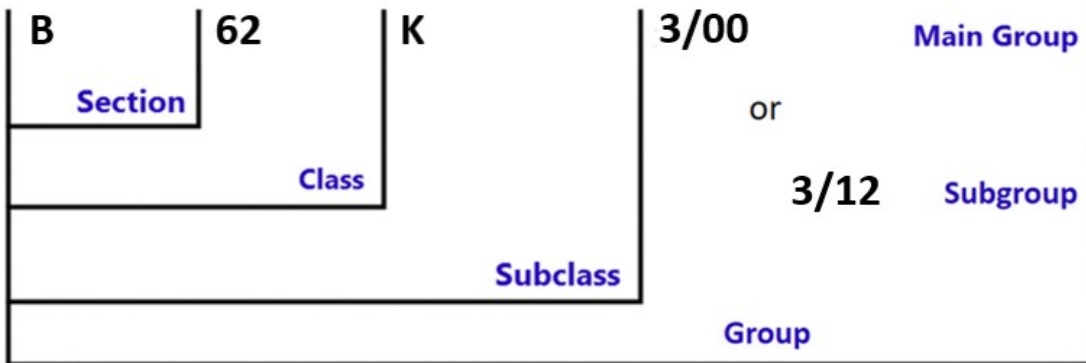


# What is Cooperative Patent Classification (CPC)?

- Joint partnership with USPTO and the European Patent Office (EPO)
- Harmonization of United States Patent Classification (USPC) and European Classification System (ECLA).
- The CPC is divided into 8 main areas, A-H:
  - A: Human Necessities
  - B: Performing Operations; Transporting
  - C: Chemistry and Metallurgy
  - D: Textiles and Paper
  - E: Fixed Construction
  - F: Mechanical Engineering; Lighting; Heating; Weapons; Blasting; Engines or Pumps
  - G: Physics
  - H: Electricity

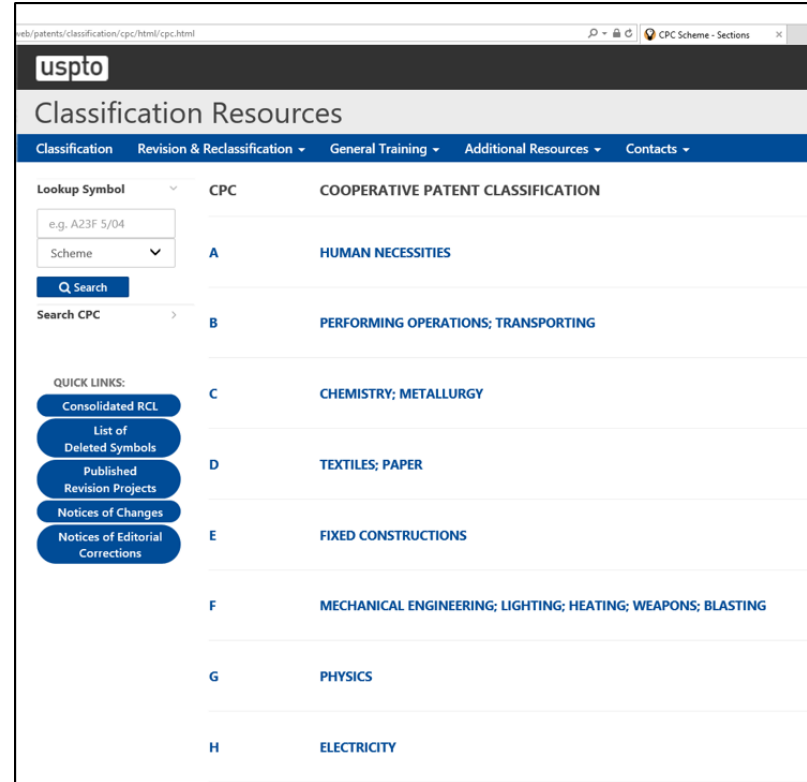
# CPC classification structure

B	Performing Operations; Transporting
B62	Land Vehicles for Travelling
B62K	Cycles; Cycle Frames; Cycle Steering Devices
B62K3/00	Bicycles
B62K3/12	Tandem Bicycles



# CPC patent classification search

- An electronic version of the CPC classification scheme is available online through the USPTO website.
- Researchers use the CPC scheme in order to determine the appropriate classification for inventions.
- Using the USPTO website, it should be possible to find CPC classes that are relevant to your friend's camping bicycle invention.



The screenshot shows the USPTO website's Classification Resources page. The page title is "Classification Resources" and the USPTO logo is visible. The main content area displays the "CPC" (Cooperative Patent Classification) scheme. A search bar is present with the text "e.g. A23F 5/04" and a "Scheme" dropdown menu. Below the search bar is a "Search CPC" button. The page lists the following CPC classes:

Lookup Symbol	CPC	COOPERATIVE PATENT CLASSIFICATION
	A	HUMAN NECESSITIES
	B	PERFORMING OPERATIONS; TRANSPORTING
	C	CHEMISTRY; METALLURGY
	D	TEXTILES; PAPER
	E	FIXED CONSTRUCTIONS
	F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
	G	PHYSICS
	H	ELECTRICITY

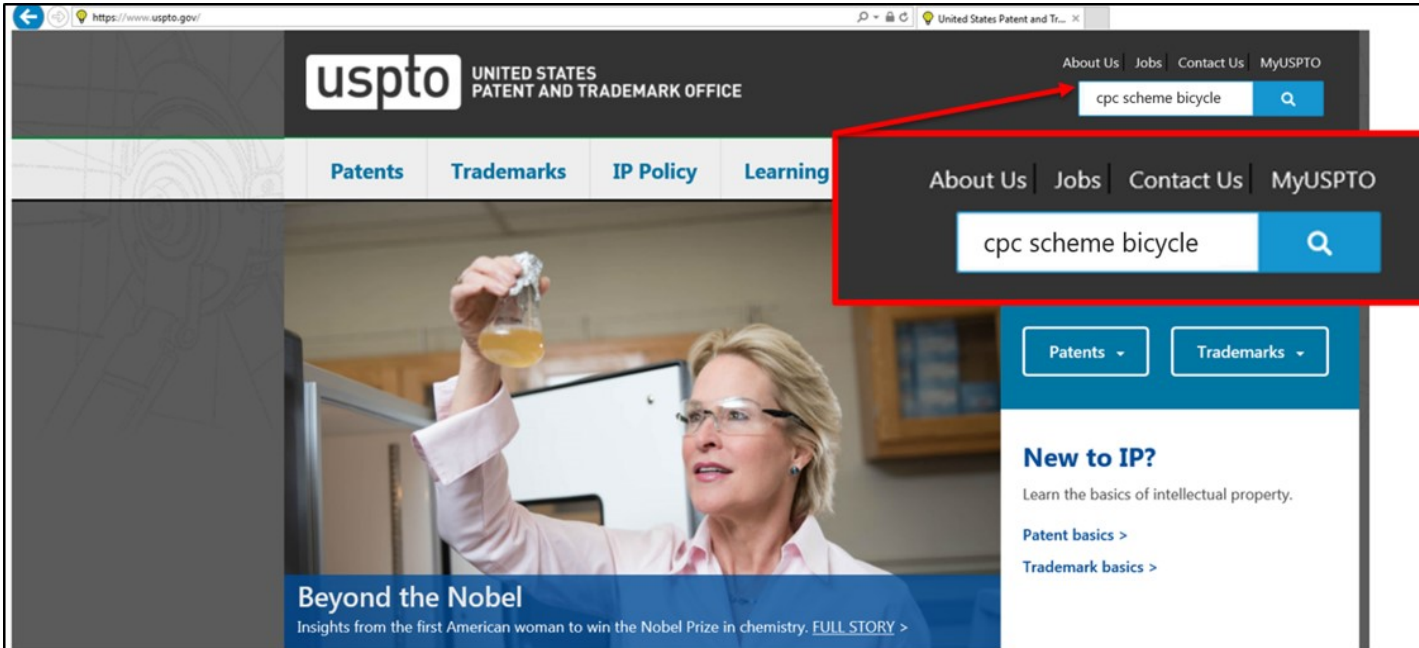
QUICK LINKS:

- Consolidated RCL
- List of Deleted Symbols
- Published Revision Projects
- Notices of Changes
- Notices of Editorial Corrections



# CPC scheme search

- Navigate to [www.uspto.gov](https://www.uspto.gov).
- Access the electronic CPC scheme by typing the phrase “cpc scheme” followed by search term(s).

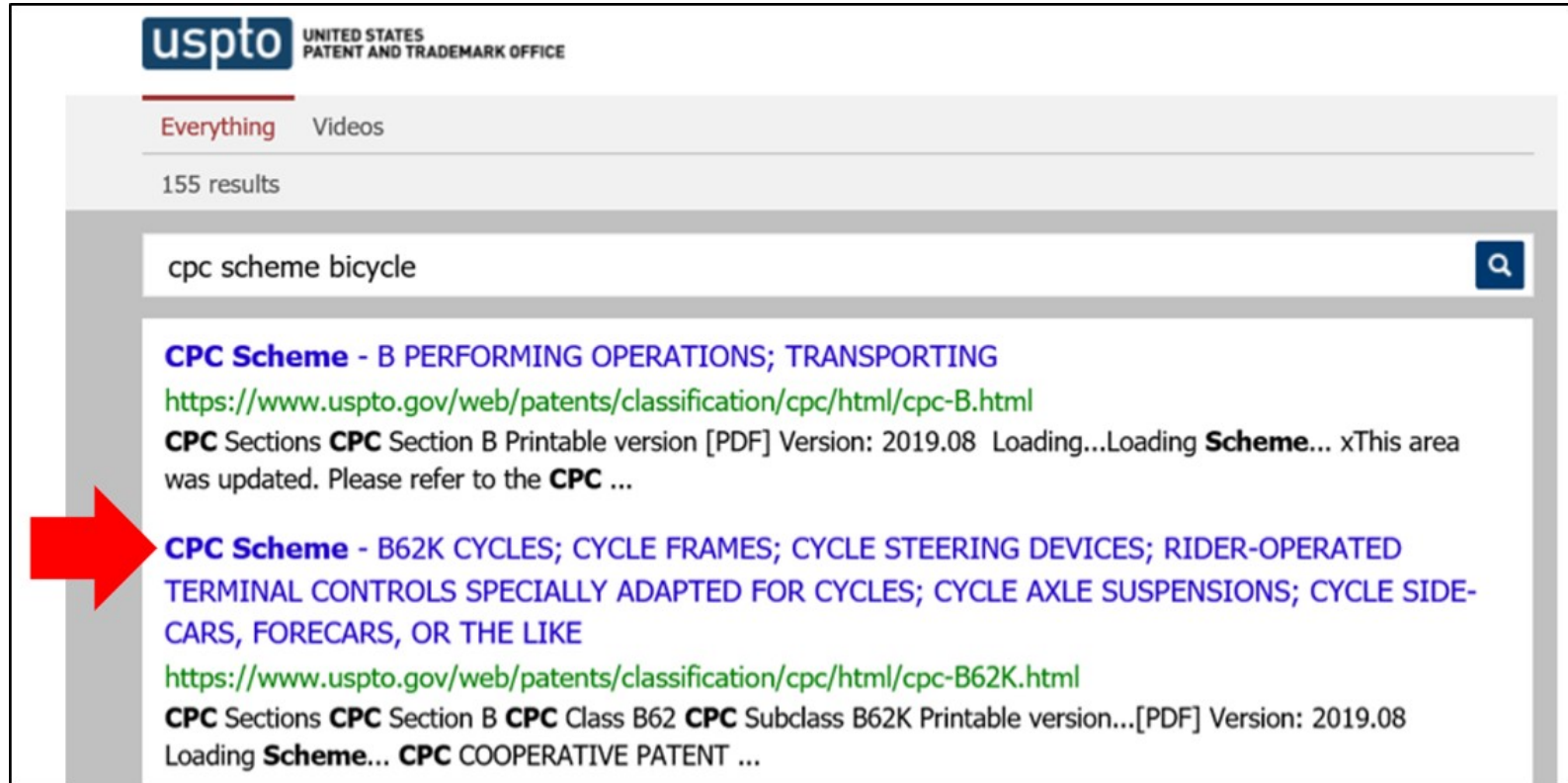


The screenshot shows the USPTO website interface. At the top, the USPTO logo and "UNITED STATES PATENT AND TRADEMARK OFFICE" are visible. A search bar in the top right corner contains the text "cpc scheme bicycle". A red arrow points from this search bar to a magnified view of the same search bar, which is highlighted with a red border. The magnified view shows the search bar with the text "cpc scheme bicycle" and a search icon. Below the search bar, there are navigation links for "About Us", "Jobs", "Contact Us", and "MyUSPTO". The main content area features a large image of a woman in a lab coat holding a flask, with the text "Beyond the Nobel" and "Insights from the first American woman to win the Nobel Prize in chemistry. [FULL STORY >](#)". To the right of the image, there are buttons for "Patents" and "Trademarks", and a section titled "New to IP?" with links for "Patent basics >" and "Trademark basics >".





# CPC scheme search results



The screenshot shows the USPTO search results page for the query 'cpc scheme bicycle'. The page header includes the USPTO logo and the text 'UNITED STATES PATENT AND TRADEMARK OFFICE'. Below the header, there are tabs for 'Everything' and 'Videos', and a notification that '155 results' were found. The search bar contains the text 'cpc scheme bicycle'. The first search result is for 'CPC Scheme - B PERFORMING OPERATIONS; TRANSPORTING', with a URL 'https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B.html'. The second result is for 'CPC Scheme - B62K CYCLES; CYCLE FRAMES; CYCLE STEERING DEVICES; RIDER-OPERATED TERMINAL CONTROLS SPECIALLY ADAPTED FOR CYCLES; CYCLE AXLE SUSPENSIONS; CYCLE SIDE-CARS, FORECARS, OR THE LIKE', with a URL 'https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B62K.html'. A red arrow points to this second result. The text for the second result includes 'CPC Sections CPC Section B CPC Class B62 CPC Subclass B62K Printable version...[PDF] Version: 2019.08 Loading Scheme... CPC COOPERATIVE PATENT ...'.

uspto UNITED STATES PATENT AND TRADEMARK OFFICE

Everything Videos

155 results

cpc scheme bicycle

**CPC Scheme - B PERFORMING OPERATIONS; TRANSPORTING**  
<https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B.html>  
CPC Sections CPC Section B Printable version [PDF] Version: 2019.08 Loading...Loading Scheme... xThis area was updated. Please refer to the CPC ...

**CPC Scheme - B62K CYCLES; CYCLE FRAMES; CYCLE STEERING DEVICES; RIDER-OPERATED TERMINAL CONTROLS SPECIALLY ADAPTED FOR CYCLES; CYCLE AXLE SUSPENSIONS; CYCLE SIDE-CARS, FORECARS, OR THE LIKE**  
<https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B62K.html>  
CPC Sections CPC Section B CPC Class B62 CPC Subclass B62K Printable version...[PDF] Version: 2019.08 Loading Scheme... CPC COOPERATIVE PATENT ...

# B62K 3/00 Land vehicles, bicycles

uspto

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## Classification Resources

Classification Revision & Reclassification General Training Additional Resources Contacts

Lookup Symbol

e.g. A23F 5/04

Scheme

Search

Search CPC

Outline ON

Display Level

Color ON

Curly Brackets ON

References ON

Date Revised OFF

Path title OFF

QUICK LINKS:

PDF

Scheme

CPC-to-IPC

Definition

Compilation of Changes

CPC Sections > CPC Section B > CPC Class B62 > CPC Subclass B62K

Printable version [PDF] Version: 2019.08

**D B62K** COOPERATIVE PATENT CLASSIFICATION  
CYCLES; CYCLE FRAMES; CYCLE STEERING DEVICES; RIDER-OPERATED TERMINAL CONTROLS  
SPECIALLY ADAPTED FOR CYCLES; CYCLE AXLE SUSPENSIONS; CYCLE SIDE-CARS, FORECARS, OR  
THE LIKE

**NOTE**  
In this subclass, each of the main groups B62K 7/00 - B62K 15/00 takes precedence over all the preceding  
main groups, e.g. a child's bicycle is classified in B62K 9/00 and not in B62K 3/00

**WARNING**  
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be  
displayed in the scheme.

**D B62K 1/00** Unicycles

**D - B62K 3/00** Bicycles

**D B62K 3/002** . {without a seat, i.e. the rider operating the vehicle in a standing position, e.g.  
motorized scooters with skis or runners}

**D B62K 3/005** . {Recumbent-type bicycles}

**D - B62K 3/02** . Frames (tandem frames B62K 3/14)

**B62K 3/04** . . having a substantially horizontal top bar

**- B62K 3/06** . . of open type

**B62K 3/08** . . . having crossing members

**B62K 3/10** . . of single-beam type, i.e. connecting steering head to rear axle

# B62K 15/00 Collapsible or foldable cycles

The screenshot shows the USPTO Classification Resources page for CPC Class B62K. The page is titled "Classification Resources" and includes a navigation menu with options like "Classification", "Revision & Reclassification", "General Training", "Additional Resources", and "Contacts". The breadcrumb trail indicates the current location: "CPC Sections > CPC Section B > CPC Class B62 > CPC Subclass B62K".

The main content area displays the classification details for B62K, including a "Printable version [PDF]" link and the version "2019.08". The classification is defined as "COOPERATIVE PATENT CLASSIFICATION CYCLES; CYCLE FRAMES; CYCLE STEERING DEVICES; RIDER-OPERATED TERMINAL CONTROLS SPECIALLY ADAPTED FOR CYCLES; CYCLE AXLE SUSPENSIONS; CYCLE SIDE-CARS, FORECARS, OR THE LIKE".

There are two notes: a "NOTE" stating that B62K 7/00 - B62K 15/00 takes precedence over preceding main groups, and a "WARNING" stating that non-limiting references may still be displayed in the scheme.

A red box highlights the following subclasses and their descriptions:

- D - B62K 15/00** Collapsible or foldable cycles
  - . {Frames adapted to be easily dismantled}
  - . {having a foldable crank or pedal}
  - . {having additional wheels for use when folded or collapsed}
- B62K 15/006**
  - . {the frame being foldable}
- B62K 15/008**
  - . . {foldable about 2 or more axes}

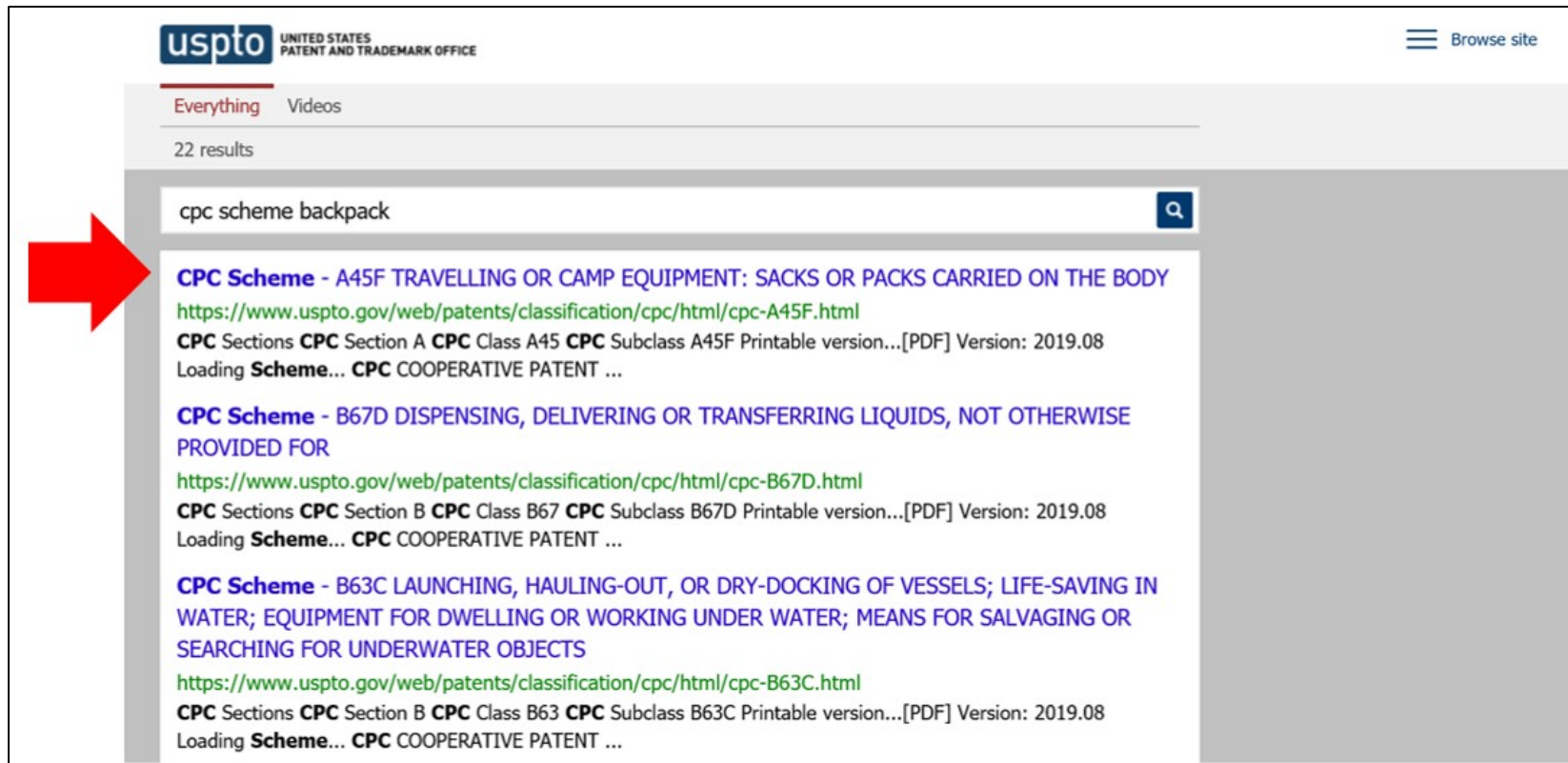
# CPC scheme search

- Navigate to [www.uspto.gov](http://www.uspto.gov)
- Access the electronic CPC scheme by typing the phrase “cpc scheme” followed by search term(s).

The screenshot displays the USPTO website interface. At the top left, the logo reads "uspto UNITED STATES PATENT AND TRADEMARK OFFICE". Navigation links for "About Us", "Jobs", "Contact Us", and "MyUSPTO" are in the top right. A search bar in the top right contains the text "cpc scheme backpack" with a magnifying glass icon. Below the search bar, a red box highlights a larger version of the search bar, also containing "cpc scheme backpack" and a magnifying glass icon. A red arrow points from the top search bar to the highlighted one. The main navigation menu includes "Patents", "Trademarks", "IP Policy", and "Learning and Resources". Below the navigation, there is a banner image of three scientists in a lab with the text "Failure or challenge? Two trailblazing innovators share insights on science, life in the lab, and beyond. FULL STORY >". To the right of the banner, there are buttons for "Patents" and "Trademarks" with dropdown arrows, and a section titled "New to IP?" with links for "Patent basics >" and "Trademark basics >".



# CPC scheme search results



uspto UNITED STATES PATENT AND TRADEMARK OFFICE Browse site

Everything Videos

22 results

cpc scheme backpack

**CPC Scheme - A45F TRAVELLING OR CAMP EQUIPMENT: SACKS OR PACKS CARRIED ON THE BODY**  
<https://www.uspto.gov/web/patents/classification/cpc/html/cpc-A45F.html>  
CPC Sections **CPC** Section A **CPC** Class A45 **CPC** Subclass A45F Printable version...[PDF] Version: 2019.08  
Loading **Scheme...** **CPC** COOPERATIVE PATENT ...

**CPC Scheme - B67D DISPENSING, DELIVERING OR TRANSFERRING LIQUIDS, NOT OTHERWISE PROVIDED FOR**  
<https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B67D.html>  
CPC Sections **CPC** Section B **CPC** Class B67 **CPC** Subclass B67D Printable version...[PDF] Version: 2019.08  
Loading **Scheme...** **CPC** COOPERATIVE PATENT ...

**CPC Scheme - B63C LAUNCHING, HAULING-OUT, OR DRY-DOCKING OF VESSELS; LIFE-SAVING IN WATER; EQUIPMENT FOR DWELLING OR WORKING UNDER WATER; MEANS FOR SALVAGING OR SEARCHING FOR UNDERWATER OBJECTS**  
<https://www.uspto.gov/web/patents/classification/cpc/html/cpc-B63C.html>  
CPC Sections **CPC** Section B **CPC** Class B63 **CPC** Subclass B63C Printable version...[PDF] Version: 2019.08  
Loading **Scheme...** **CPC** COOPERATIVE PATENT ...

# CPC subclasses A45F3/00, A45F4/00

The screenshot shows the USPTO Classification Resources page for CPC Class A45F. The page is titled "Classification Resources" and has a navigation menu with options: Classification, Revision & Reclassification, General Training, Additional Resources, and Contacts. The breadcrumb trail is: CPC Sections > CPC Section A > CPC Class A45 > CPC Subclass A45F. The page includes a search bar with "e.g. A23F 5/04" and a "Scheme" dropdown. A "Q Search" button is present. On the left, there are several toggle and dropdown options: Outline (ON), Display (Level), Color (ON), Curly Brackets (ON), References (ON), Date Revised (OFF), and Path title (OFF). Below these are "QUICK LINKS:" and a "PDF" button. The main content area shows the CPC Class A45F description: "COOPERATIVE PATENT CLASSIFICATION TRAVELLING OR CAMP EQUIPMENT: SACKS OR PACKS CARRIED ON THE BODY". A "NOTE" states: "This subclass covers only the equipment specified in its subdivisions. Travelling or camp equipment is normally classified in the classes for the equipment concerned, e.g. camp furniture A47." Below the note, there is a list of subclasses: "A45F 3/00 Travelling or camp articles (travelling rugs A47G 9/06); Sacks or packs carried on the body (convertible into other articles A45F 4/00) . {Accessories}" and "A45F 2003/001 . {Accessories}" and "A45F 2003/002 . {Sacks or packs carried on the body by means of a single strap passing around the neck}". The subclass A45F 3/00 is highlighted with a red box.

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## Classification Resources

Classification Revision & Reclassification General Training Additional Resources Contacts

Lookup Symbol

e.g. A23F 5/04

Scheme

Q Search

Search CPC

Outline  ON

Display

Color  ON

Curly Brackets  ON

References  ON

Date Revised  OFF

Path title  OFF

QUICK LINKS:

PDF

CPC Sections > CPC Section A > CPC Class A45 > CPC Subclass A45F

Printable version [PDF] Version: 2019.08

**D** **A45F** COOPERATIVE PATENT CLASSIFICATION  
TRAVELLING OR CAMP EQUIPMENT: SACKS OR PACKS CARRIED ON THE BODY

**NOTE**

This subclass covers only the equipment specified in its subdivisions. Travelling or camp equipment is normally classified in the classes for the equipment concerned, e.g. camp furniture A47.

**D** **A45F 3/00** Travelling or camp articles (travelling rugs A47G 9/06); Sacks or packs carried on the body (convertible into other articles A45F 4/00) . {Accessories}

A45F 2003/001 . {Accessories}

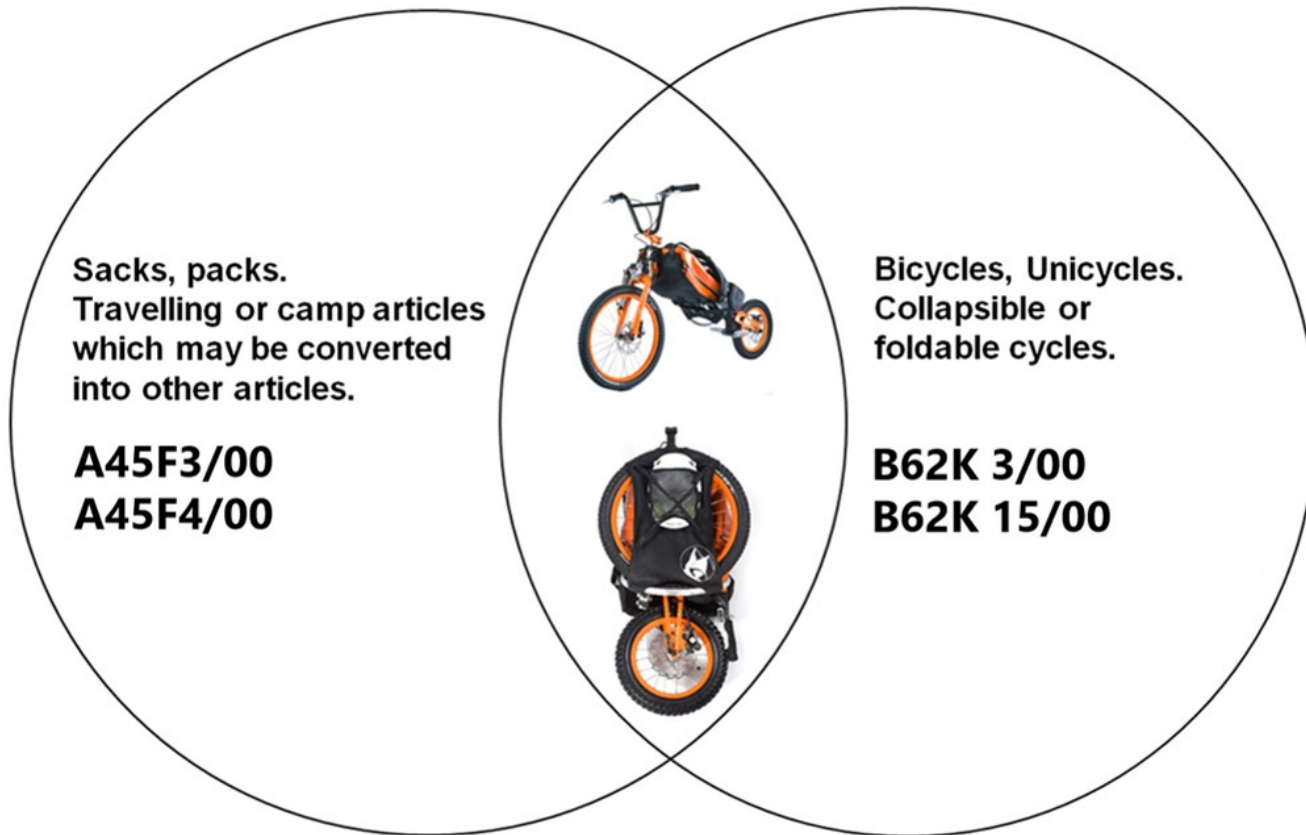
**D** **A45F 3/00** Travelling or camp articles (travelling rugs A47G 9/06); Sacks or packs carried on the body (convertible into other articles A45F 4/00)

A45F 2003/001 . {Accessories}

A45F 2003/002 . {Sacks or packs carried on the body by means of a single strap passing around the neck}



# Boolean classification search



# Boolean classification search

The screenshot shows the EAST software interface. The search query is "L1 AND L2". The results are displayed in a tree view under "Active". A red box highlights the search results in the tree view, and a red arrow points from it to the table below.

Search: Classification [List] [Browse] [Cancel] [Gear]

DBs: US-PG/PUB; US/PAT; FFRS; EPO; IPO; DER/VENT

Default operator: OR

Prior Art Search  Order by Date

Interference Search  Order by % of Hit Terms

Blurbs  Highlight all hit terms initially  Show errors

L1 AND L2

Active

- L1: (19,340) B62K3/\$.cpc. OR B62K15/\$.cpc.
- L2: (27,074) A45F3/\$.cpc. OR A45F4/\$.cpc.
- L3: (98) L1 AND L2

Failed

Documents 1 through 98 of 98 - Filtered by Family ID (25 Families)

[FLT]	1	S	Document ID	Filing Dat	Title	Publication Da
9			US 20050109804 A1	20031121	Backpack for carrying a bicycle	20050526
10			US 20020104863 A1	20010820	Scooter bag	20020808
11			US 20020088834 A1	20010109	Scooter storage and carrying backpack	20020711
12			US 7837206 B1	20080317	Wheeled carrier scooter	20101123



# Classification search sample result

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau

(43) International Publication Date  
21 October 2010 (21.10.2010)



(10) International Publication Number  
WO 2010/118499 A1

(51) International Patent Classification  
B62K 15/00 (2006.01) A45F 3/04 (2006.01)

(72) Inventor and Applicant - **TRIH, Andy** [CA;CA: 5512 Woodhouse Crescent, Mississauga, Ontario L4Z 3P9 (CA)]

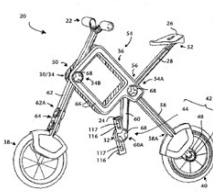
(74) Agent - **REINOLD & MAYBEE LLP** et al., Suite 308, 1 City Centre Drive, Mississauga, Ontario L5B 1M2 (CA)

(86) Designated States (unless otherwise indicated, for every class of national protection available): AE, AG, AL, AM, AU, AT, AU, AZ, BA, BB, BG, BH, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GR, GM, GT, HN, HR, HU, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LG, LI, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SI, SK, SM, SN, SV, SY, TH, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every class of national protection available): ABRO (BR, GB, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, LV, MC, MT, NL, NO, PL, PT, RO, SI, SK, TR), OAPI (BF, BI, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NI, SN, TD, TG).

**Published**  
with international search report (Art. 21(3))

(54) **THE COLLAPSIBLE BICYCLE**



(57) **Abstract:** An improved bicycle of the type having a frame and a pair of wheels is disclosed. The improvement comprises a conventional rear arm extending to an end to which the rear wheel is mounted for rotation about its axis and a controllable front arm extending to an end to which the front wheel is mounted for rotation about its axis. The improvement also includes a receiver forming part of the frame and having opposite ends from which the front arm and the rear arm extend and to which the front arm and rear arm are operatively pre-coupled to permit the front arm and the rear arm to be folded at least substantially against one another in a storage configuration of the improved bicycle.

WO 2010/118499 A1

WO 2010/118499 PCT/CA2009/000505

2/4

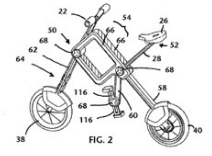
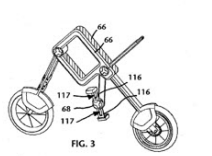
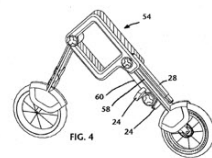
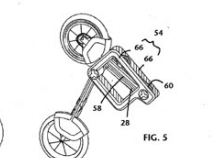
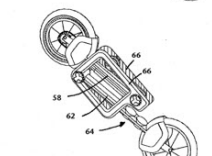
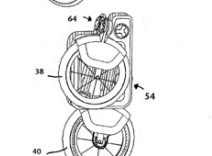







FIG. 2 FIG. 3  
FIG. 4 FIG. 5  
FIG. 6 FIG. 7

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WO 2010/118499 PCT/CA2009/000505

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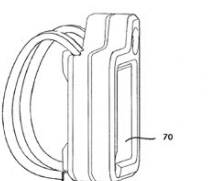
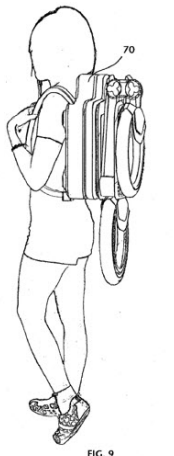



FIG. 8 FIG. 9

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# Searching Resources

## USPTO Resources

- Examiner's Automated Search Tool (Pub**EAST**)
- Web-based Examiner Search Tool (Pub**WEST**)
- USPTO Patent Full-text and Image Database (**PatFT**)
- USPTO Patent Application Full-text and Image Database (**AppFT**)
- Patent Application Image Retrieval (**PAIR**)
- Patent Assignment Database
- Global Dossier

# Searching Resources

## USPTO Resources cont'd...

- Pub**EAST** & Pub**WEST**
  - Are tools used by Patent Examiners at USPTO
  - Supports both Text and Classification searches
  - Available for public use **only** at USPTO Offices and Patent and Trademark Resource Centers (PTRC).
  - Searches U.S. Patents and U.S. Patent Applications (PG-PUBS)
- USPTO Patent Full-text and Image Database (**PatFT**)
  - Searches U.S. Patents. The USPTO houses full text for patents issued from 1976 to the present and PDF images for all patents from 1790 to the present.
  - Available publicly at: <https://www.uspto.gov/patents/search>
- USPTO Patent Application Full-text and Image Database (**AppFT**)
  - Search for Full-Text and Image versions of published patent applications
  - Available publicly at: <https://www.uspto.gov/patents/search>

# Searching Resources

## USPTO Resources cont'd...

- Patent Image Retrieval (**PAIR**)
  - Access to complete prosecution history of issued U.S. Patents and published U.S. patent applications.
- Global Dossier
  - Global Dossier was released to the public in November 2015
  - The information available via Global Dossier includes search and examination results of all applications that comprise a family and that have been filed in participating IP offices.
  - Available publicly at: <https://www.uspto.gov/patents/basics/international-protection/global-dossier-initiative>
- Patent Assignment Database
  - Is a website to search for a USPTO record of patent assignments and changes in ownership.
  - Available publicly at: <https://assignment.uspto.gov/patent/index.html#/patent/search>

# Searching Resources

## Non-USPTO Resources

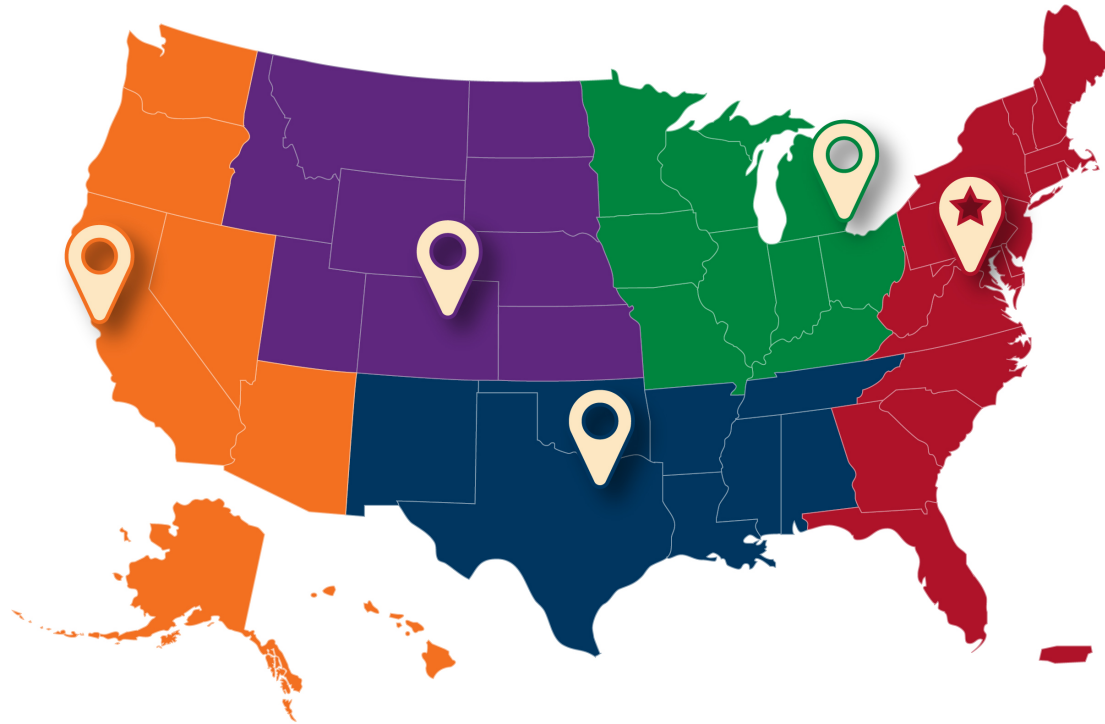
- Google Patent Search™ service
  - <https://patents.google.com/>
- Any web-based search engine
  - [www.archive.org](http://www.archive.org)
  - Wayback Machine which shows older cached versions of the webpage URL.
- Other Pertinent Databases
  - Video websites
  - IEEE Databases
  - Scientific Journals and Databases
  - Magazines, Newspapers and associated Databases.



# Searching Resources




## Foreign Resources



- European Patent Office (EPO)
  - The EPO provides the ability to search over a network of Europe's patent databases.
  - This site also provides access to machine translation of European patents for some languages.
  - [https://worldwide.espacenet.com/singleLineSearch?locale=en\\_EP](https://worldwide.espacenet.com/singleLineSearch?locale=en_EP)
- Japanese Patent Office (JPO)
  - The JPO provides access to machine translations of Japanese patents.
- Korean Intellectual Property Office (KIPO)
  - The KIPO provides the ability to search and translations of Korean patents.
  - <http://eng.kipris.or.kr/enghome/main.jsp>
- World Intellectual Property Organization (WIPO)
  - Using PATENTSCOPE you can search 94 million patent documents including 4.0 million published international patent applications (PCT).
  - <https://patentscope.wipo.int/search/en/search.jsf>

# Find help in your area



 USPTO office location  
 USPTO headquarters

 West Coast region  
 Rocky Mountain region  
 Texas region

 Midwest region  
 East Coast region

## USPTO offices:

### Headquarters:

- Alexandria, VA

### Regional offices:

- Detroit
- Denver
- Silicon Valley
- Dallas

## Additional resources:

- Pro Se Assistance Center
- Inventors Assistance Center (IAC)
- Patents Ombudsman
- Application Assistance Unit (AAU)

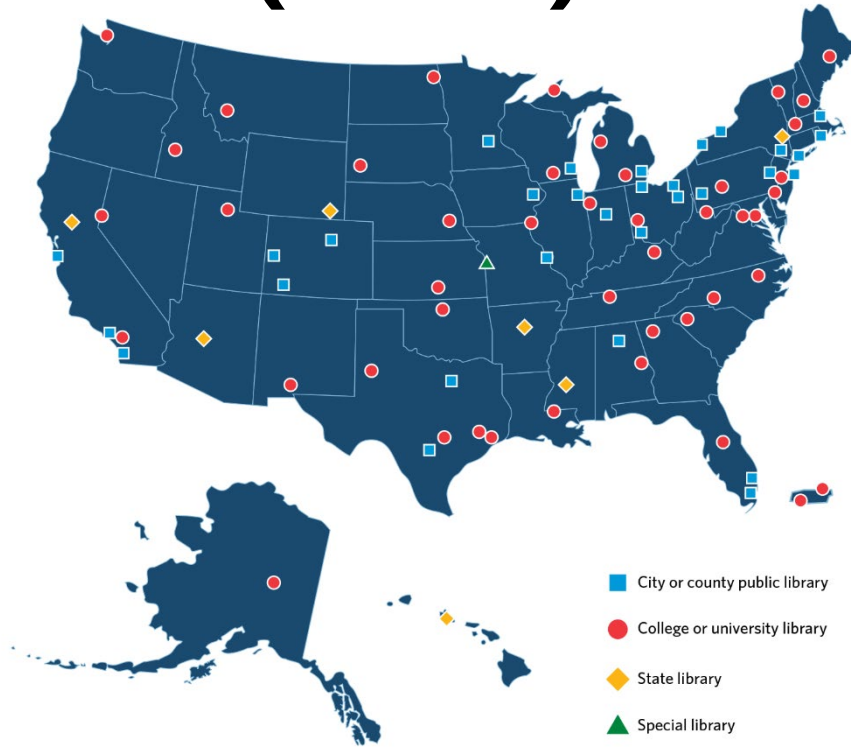
[uspto.gov](https://www.uspto.gov)



# Patent and Trademark Resource Centers (PTRC)

Nationwide network of public, state, and academic libraries designated by the USPTO to disseminate patent and trademark information and support the intellectual property needs of the public.

For more information, visit [www.uspto.gov/ptrc](http://www.uspto.gov/ptrc).





# Pro se Assistance Center

- **Thoroughly customer-focus business unit with dedicated personnel** to assist and educate inventors who have limited resources and needing help applying for a patent.
  - How to navigate uspto.gov to find needed information or education
  - How to obtain and complete forms (e.g., application data sheet)
- **Targeted support** to connect independent inventors, small business owners, and entrepreneurs with helpful and relevant resources and information.
- ***One-on-one* assistance at USPTO headquarters (currently virtual) and virtual assistance from select Patent and Trademark Resource Centers (PTRCs).**



# Pro se Assistance program

## Webpage:

[www.uspto.gov/ProSePatents](http://www.uspto.gov/ProSePatents)

## Hours:

8:30 a.m. – 5 p.m. (ET)  
Monday through Friday

## Email:

innovationdevelopment@uspto.gov

**Phone:** (866) 757-3848

The Pro Se Assistance Program provides outreach and education to applicants (also known as "pro se" applicants) who file patent applications without the assistance of a registered patent attorney or agent. USPTO employees cannot give legal advice. However, through increased assistance and resources for independent inventor and small business communities, the program aims to increase the quality of pro se applications and assist pro se applicants with making informed decisions regarding their patent applications.

## Patent process training

To assist applicants at all stages of the patent examination process the Office of Innovation Development (OID) also provides ongoing education:

[Expand all](#) | [Collapse all](#)

- › Tools for filing an application
- › Quick Clinic Video Series
- › Knowledge packs for pre-filing
- › Prior Inventor Info Chats



# Other USPTO resources

**Helpline: 1-800-PTO-9199**

Resource	Website
Utility patent application guide	<a href="http://www.uspto.gov/patents/resources/types/utility.jsp">www.uspto.gov/patents/resources/types/utility.jsp</a>
Patent process	<a href="http://www.uspto.gov/patents/process">www.uspto.gov/patents/process</a>
Patent search guide	<a href="http://www.uspto.gov/patents/process/search">www.uspto.gov/patents/process/search</a>
Inventor and entrepreneur resources	<a href="http://www.uspto.gov/inventors">www.uspto.gov/inventors</a>
Pro se assistance	<a href="http://www.uspto.gov/ProSePatents">www.uspto.gov/ProSePatents</a>
Micro entity Information	<a href="http://www.uspto.gov/PatentMicroentity">www.uspto.gov/PatentMicroentity</a>



